

BY ORDER OF THE COMMANDER

**AIR FORCE OCCUPATIONAL SAFETY AND
HEALTH STANDARD 48-139**



**AIR FORCE OPERATIONAL TEST AND
EVALUATION CENTER**
Supplement 1

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Occupational Health

LASER RADIATION PROTECTION PROGRAM

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AFOSHSTD 48-139, 10 December 1999, is supplemented as follows:

This supplement applies to HQ AFOTEC and AFOTEC detachments and operating locations. It further defines and assigns responsibilities outlined in the basic Standard for healthful and safe operations and testing of laser systems by AFOTEC personnel.

- 1.6. HQ AFOTEC will be included in the responsibilities of a MAJCOM/FOA.
- 1.6.4. (Added) AFOTEC/SE will implement and conduct an AFOTEC laser safety program providing all aspects required by the standard except for host installation requirements.
- 1.6.5. (Added) AFOTEC/SE will maintain a qualified laser safety officer and perform system level analysis for systems under test through the Environment, Safety and Health Certification Board (ES&HCB) process.
- 1.6.6. (Added) AFOTEC/SE will attend core team meetings, advise on laser safety issues, and provide technical assistance to Detachment/Operating Location (OL) personnel as required.
- 1.6.7. (Added) AFOTEC/SE will provide initial/recurring training for AFOTEC personnel where no host installation training program exists.
- 1.9.1. All policies and procedures to be used by AFOTEC personnel will be coordinated with AFOTEC/SE prior to implementation.
- 1.11. AFOTEC Detachment and OL commanders will satisfy unit commander responsibilities.
- 1.11.2. Test Director (TD) will ensure all task orders for contractor support include provisions to satisfy this requirement prior to contract award and any exposure to lasers.
- 1.12. Detachment/OL laser safety officers will satisfy unit designated laser safety officer responsibilities.
- 1.12.2. Detachment/OL laser safety officer will coordinate with host installation BE, SE and also notify AFOTEC/SE of all suspected exposures, incidents, and mishaps.

1.12.6. Detachment/OL laser safety officers must coordinate initial and annual laser safety training for affected personnel. Document all initial and recurring training, dates, and supported test program. Coordinate training with host installation BE staff and AFOTEC/SE.

1.12.8. (Added) Detachment/OL laser safety officers will ensure affected personnel will comply with the host installation medical surveillance requirements prior to any laser contractor/government demonstrations or test event and will document a record of personnel who require medical surveillance. The host installation will help determine frequency of examination as well as medical examination requirements.

1.13. TD will satisfy workplace supervisor responsibilities.

1.13.6. To reduce redundancy, documentation for training may be kept with the Detachment/OL laser safety officer.

1.13.7. (Added) Specific laser system and subsystem hazard analysis may be used in lieu of AFOSHSTD 48-139 Attachment 3 if analysis information contains the minimum information required in the attachment. The AFOTEC Test Director (TD) will ensure analysis information is provided to AFOTEC/SE prior to convening the ES&HCB.

2.1.1. AFOTEC detachments and OLs will follow host installation laser safety requirements.

2.2.1. All hazard evaluations, NOHDs, and OD determinations will be approved by AFOTEC/SE prior to test events.

2.2.1.1. (Added) Prior to the start of operational testing, Operational Support Hazard Analysis, Hazard Evaluations, and required engineering/administrative controls developed during the developmental testing must be available and in use. For Advanced Concept Technology Demonstrations (ACTD) and non-traditional assessments (NTA) where no developmental analysis is available, a hazard evaluation to include the laser system and its ancillary subsystem must be accomplished to identify required engineering/administrative controls required to be in place prior to ES&HCB.

2.2.2. Submit a completed AF Form 2760, Laser Hazard Evaluation form with attachment 3 data (or equivalent) to AFOTEC/SE.

2.3.1. All identified ancillary hazards will be coordinated with AFOTEC/SE prior to ES&HCB.

2.4.1. Detachment/OL laser safety officers will ensure all affected personnel are provided initial training prior to any laser contractor/government demonstrations or test event. Annual recurring laser training is required. Detachment/OL laser safety officers will contact host installation BE staff laser safety officer for initial/recurring training. Coordinate initial/recurring training with AFOTEC/SE where no installation program exists. Additionally, test team personnel will be trained on specific technology hazards at the beginning of the test program with updates throughout the program as applicable.

2.6.2.2. The supervisor at the test location will also immediately report all incidents to the detachment commander and AFOTEC/SE.

2.6.4. Detachment/OL laser safety officers will contact AFOTEC/SE for any support required/requested by host installation Bio-Environmental Engineering Flight.

2.6.5. Detachment/OL laser safety officers will forward a copy to AFOTEC/SE.

2.6.6. Detachment/OL laser safety officers will forward a copy to AFOTEC/SE.

4.1. All control measures will be documented in the applicable test plan and approved by AFOTEC/SE during ES&HCB.

4.3.2.1. All LEP to be used by test personnel must be approved by AFOTEC/SE prior to use/test.

4.3.4. All PPE to be used by test personnel must be approved by AFOTEC/SE prior to use/test.

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****Terms***

Affected Personnel—AFOTEC personnel who will expect to regularly work with or around lasers, or in a laser environment. These personnel include, but are not limited to, test directors, analysts, laboratory personnel, aircrew, combat control teams, special operations forces, and laser range personnel.

FELIX DUPRÉ, Major General, USAF
Commander